

AGENDA
CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC)
June 7, 2007 Meeting
110 Taylor St, San Diego, CA 92110
TIME 9:00 AM

Organization Items

- 1. Introduction**
- 2. Approval of Minutes (February 15, 2007 Meeting)**
- 3. Membership**
- 4. Public Comments**

At this time, members of the public may comment on any item not appearing on the agenda. Matters presented under this item cannot be discussed or acted upon by the Committee at this time. For items appearing on the agenda, the public is invited to make comments at the time the item is considered by the Committee. Any person addressing the Committee will be limited to a maximum of five (5) minutes so that all interested parties have an opportunity to speak. When addressing Committee, please state your name, address, and business or organization you are representing for the record.

Agenda Items

5. Public Hearing

Prior to adopting rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to Section 21400 of the California Vehicle Code (CVC), the Department of Transportation is required to consult with local agencies and hold public hearings.

06-8	FHWA's Interim Approval for Optional Use of (Flashing Yellow Arrow) Traffic Control Devices	(Continued) (Mansourian)
06-12	No Parking Signs (City of San Francisco)	(Continued) (Fisher)
07-11	Veterans National Cemetery Signs (Requested by Caltrans)	(Introduction) (Henley)
07-12	Amendment to CA MUTCD Section 4E.08 Pedestrian Detectors (Requested By Caltrans)	(Introduction) (Henley)
07-13	Experimental Process With New Traffic Control Devices (Requested By Caltrans)	(Introduction) (Henley)
07-14	Process to Adopt Interim Approvals in California Issued by the FHWA (Requested By Caltrans)	(Introduction) (Henley)
07-15	Proposal to Adopt "Safety Awareness Zone Next XX Miles" (Requested By Caltrans)	(Introduction) (Henley)
07-16	SB 848, as Amended, Corbett. Vehicles: Engineering and Traffic Survey: Speed Trap.	(Introduction) (Bahadori)

07-17 Proposal for C17A (CA) ROAD WORK Plaque and Amendment to CA MUTCD Section 6F.104 (Requested By Caltrans) (Introduction)
(Henley)

07-18 Proposal to Amend FWY Detour With Arrow SC9 (CA) Sign and Adopt Exit With Arrow Sign - (Requested By Caltrans) (Introduction)
(Henley)

6. Request for Experimentation

03-14 Numbering of Signalized Intersections (Continued)
(Final Report by the CVAG) (Babico)

00-03 Trucks Minimize Engine Brake Noise (Continued)
(Requested By Caltrans) (Henley)

07-19 Wildlife Corridor Signage (Introduction)
(Request by County of San Bernardino) (Babico)

07-20 Request for Permission to Experiment with “Hawk” Traffic Control Devices (Requested Agency – City of Emeryville) (Introduction)
(Borstel)

01-4 Tactile Pedestrian Indicator With Audible Information (Continued)
at the Crosswalk with IRWLs (In-Roadway Warning Lights) (Borstel)

7. Discussion Items

07-21 Proposal to Install Audible Features at the Uncontrolled Crosswalk (Introduction)
(Requested By Caltrans) (Henley)

8. Information Items - None

9. Tabled Item

06-7 MUTCD 2003 Revision No. 1 (Pharmacy Signing) (Continued)
(Proposed to Adopt Pharmacy Signing in CA) (Henley)

10. Next Meeting

11. Adjourn

ITEM UNDER EXPERIMENTATION

- | | | |
|-------|--|------------|
| 99-12 | Speed Striping FOR Smart Crosswalks
(Experiment requested by Caltrans D7) | (Meis) |
| 01-9 | IN-ROADWAY WARNING LIGHTS AT R/R CROSSINGS
(Experiment requests by CPUC in cooperation Kern Co. & City of Fresno) | (Meis) |
| 04-9 | Request to Experiment with “Watch The Road” Sign
(Experiment Agency – Los Angles DOT) | (Bahadori) |
| 04-10 | Slow for the Cone Zone Sign
(Experiment Agency – Caltrans) | (Meis) |
| 04-12 | Requests for experimentation with “Flashing Yellow Arrows”
(Experiment Agency – City of Fullerton and Pasadena) | (Bahadori) |
| 05-10 | Proposal for the Watershed Boundary Signs
(City of San Diego) | (Meis) |

STATUS OF CALTRANS ACTION ON PAST ITEMS

Item 01-1 U-TURN SIGNAL HEADS INDICATOR

Caltrans will develop appropriate standards to ensure visibility and make the U-turn signal head indicator an official traffic control device by inclusion in the CA MUTCD.

Public Hearing:**06-8 FHWA's Interim Approval for Optional Use of (Flashing Yellow Arrow) Traffic Control Devices.**

Background: The CTCDC Chairman asked to place this letter on the agenda for the Committee's review and to see whether the Committee would reconsider Caltrans recommendations in regards to the FYA or not.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION**DIVISION OF TRAFFIC OPERATIONS**

1120 N STREET, MS 36

P. O. BOX 942873

SACRAMENTO, CA 94273-0001

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March 29, 2007

Mr. Farhad Mansourian, Chairman
California Traffic Control Devices Committee
Director of Public Works Department
Marin County
P.O. Box 4186, San Rafael, CA 94913

Dear Mr. Mansourian,

The California Department of Transportation (Caltrans) is sending you this letter in regards to its decision pertaining to the use of Flashing Yellow Arrow (FYA) at signalized intersections. As you are aware, the Federal Highway Administration (FHWA) has issued an Interim Approval (IA) for the use of the FYA during permissive operation. The California Traffic Control Devices Committee (CTCDC) has also been evaluating the FHWA's IA for use in California.

Caltrans has previously presented its argument regarding the adoption of the FHWA's IA at CTCDC meetings held on October 26, 2006 and February 15, 2007. The IA does not fully address some of the safety concerns regarding the operation of the FYA. It lacks the additional sequence of phasing to avoid the conflicting left turn yellow arrow and the opposing yellow through movements. Although, the additional safety requirements may seem to be inefficient and could add a few more seconds to the overall cycle length, it is critical that both left turn and the opposing through vehicular phases can safely clear the intersection during the yellow interval.

The primary role of traffic signals is to provide the safe movement of vehicular and pedestrian traffic at signalized intersections. Therefore, Caltrans would consider the use of FYA operation only when the additional sequence of phasing is implemented in the traffic signal system. Caltrans will not request blanket approval for the entire State because the IA does not fully comply with Caltrans standards of practice. If the CTCDC wishes, Caltrans can request a statewide FYA IA for the entire State with the added safeguards. We request that you share this letter with other members of the CTCDC. Please feel free to contact me if you have any questions or comments.

Sincerely,

Mike Bauer, Chief
Office of Signs, Markings and Permits

06-12 No Parking Signs

During the last CTCDC meeting on February 15, 2007, John Fisher apprised the Committee in regards to the work achieved by the Subcommittee on the letter received from the City/County of San Francisco stating that they have a number of “No Parking” signs in the field that are not compliant with the CA MUTCD or MUTCD. **The recommendations by the Subcommittee are attached separate as an Attachment “Agenda Item 06-12 Subcommittee’s Report.”** These recommendations will be shared with the full Committee and with public during the June 7, 2007 meeting for further action.

07-11 Veterans National Cemetery Signs**BACKGROUND**

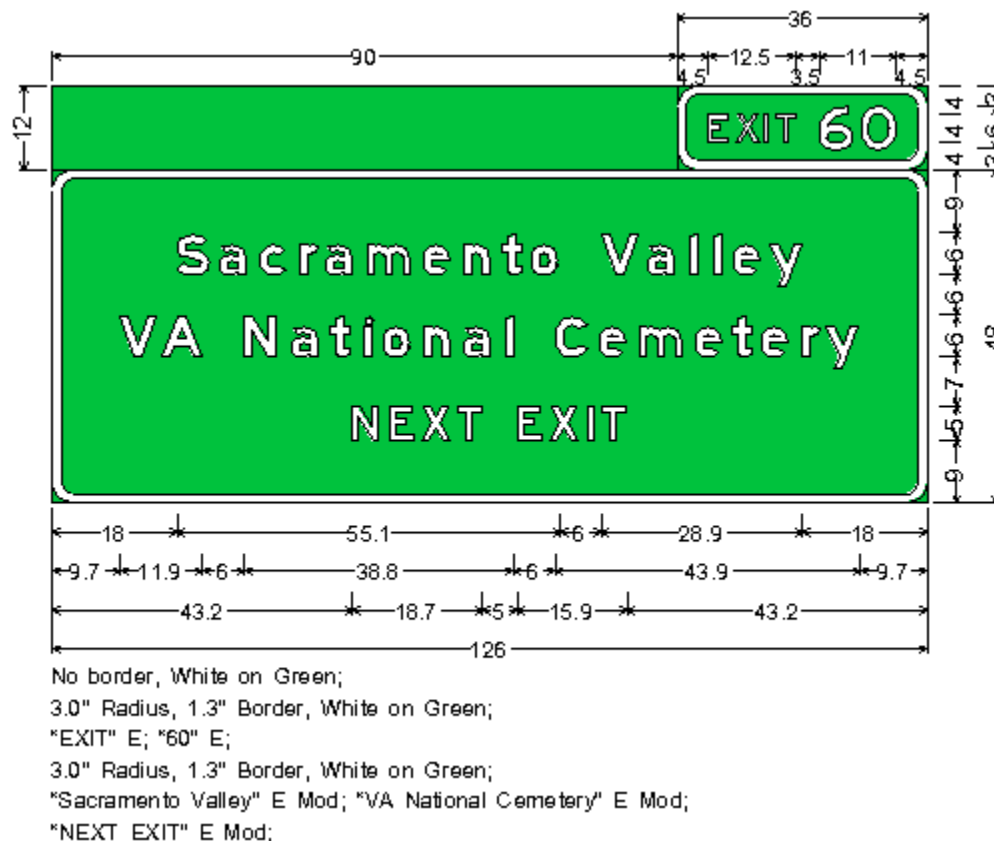
The United States Congress authorized the Department of Veterans Affairs to establish eight (8) national cemeteries in California. Thus far, seven (7) national cemeteries have been established in California. They are the Sacramento Valley VA, Riverside, San Joaquin Valley, Fort Rosecrans, Los Angeles, San Francisco, and Golden Gate National Cemetery.

The Sacramento Valley VA National Cemetery, located 1.3 miles east of Interstate 80, requested a sign to be installed at Midway Road exit in Solano County between the cities of Dixon and Vacaville.

IMPLEMENTATION

The Department, upon request from the Federal Department of Veterans Administration, will install one sign in each direction of travel from the nearest State highway. Districts may order and install new or replacement signs or may have the signs ordered and installed by others under an encroachment permit.

The message would be as follows:



Caltrans ask the Committee to make recommendation to adopt "Veterans National Cemetery" sign as an official sign.

07-12 Amendment to Section 4E.08 Pedestrian Detectors of CA MUTCD**Background: (Existing Language)**

Caltrans standard practice is to install the Pedestrian Detectors (Pedestrians Push Buttons) at 1.0 meter (3.4 Ft) mounting height above pavement/sidewalk.

California MUTCD recommends an approximate 1.1 meter (3.5 Ft) above the sidewalk should be used for pedestrian push-button detectors.

Current Language: The current language in the CAMUTCD, chapter 4, **Section 4E.08 Pedestrian Detectors**, under the second STANDARDS:

Standard:

If the pedestrian clearance time is sufficient only to cross from the curb or shoulder to a median of sufficient width for pedestrians to wait and the signals are pedestrian actuated, an additional pedestrian detector shall be provided in the median.

Guidance:

The use of additional pedestrian detectors on islands or medians where a pedestrian might become stranded should be considered.

A mounting height of approximately 1.1 m (3.5 ft) above the sidewalk should be used for pedestrian push-button detectors.

If used, special purpose push-buttons (to be operated only by authorized persons) should include a housing capable of being locked to prevent access by the general public and do not need an instructional sign.

Standard: (Proposed Language)

If the pedestrian clearance time is sufficient only to cross from the curb or shoulder to a median of sufficient width for pedestrians to wait and the signals are pedestrian actuated, an additional pedestrian detector shall be provided in the median.

A mounting height of 1.0 m (3.3 ft) above the sidewalk shall be used for pedestrian push-button detectors.

Guidance:

The use of additional pedestrian detectors on islands or medians where a pedestrian might become stranded should be considered.

~~A mounting height of approximately 1.1 m (3.5 ft) above the sidewalk should be used for pedestrian push-button detectors.~~

Reasons:

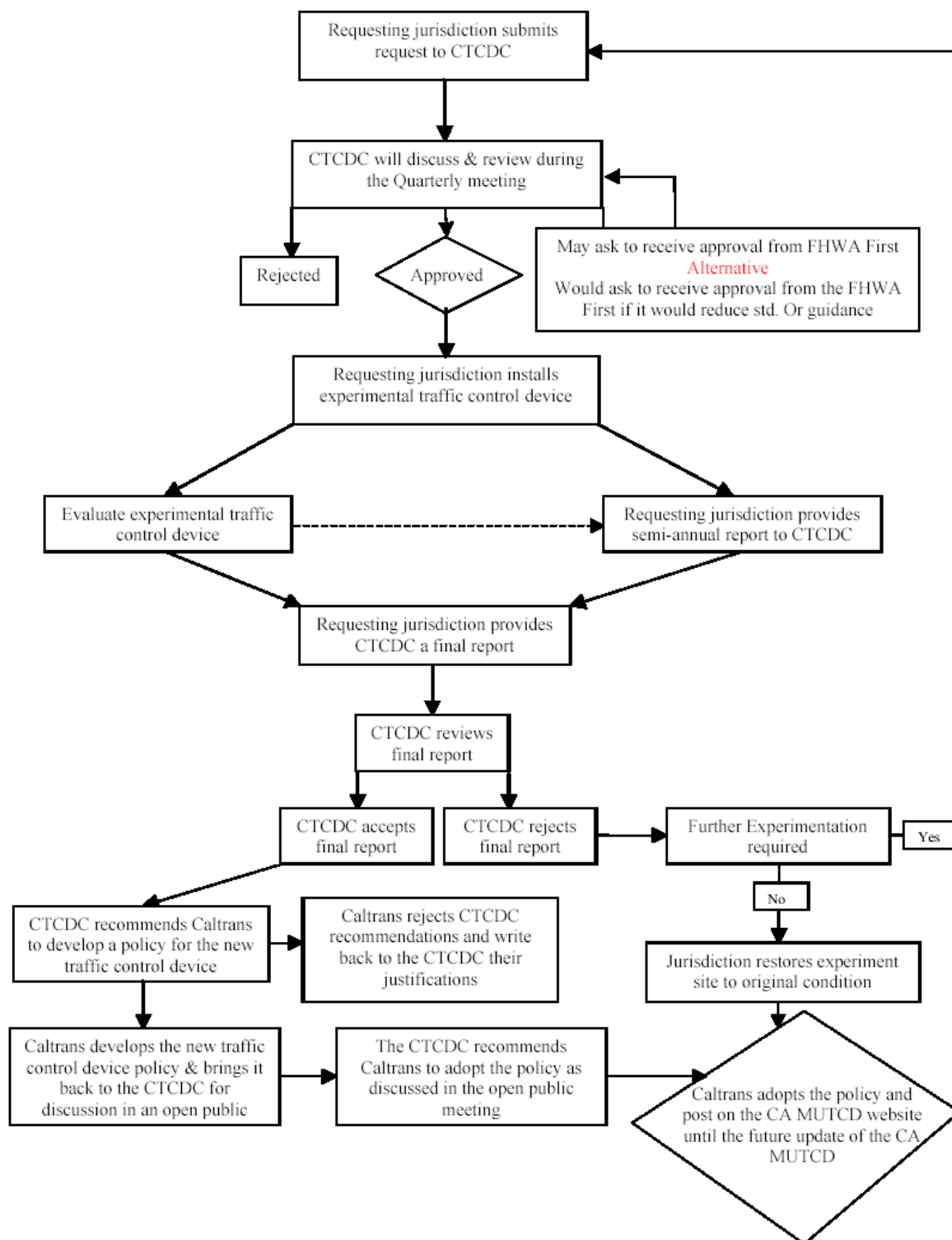
The 1.0 meter (3.3 Ft) height of the Pedestrian Push buttons has been always the Caltrans Standard design practice.

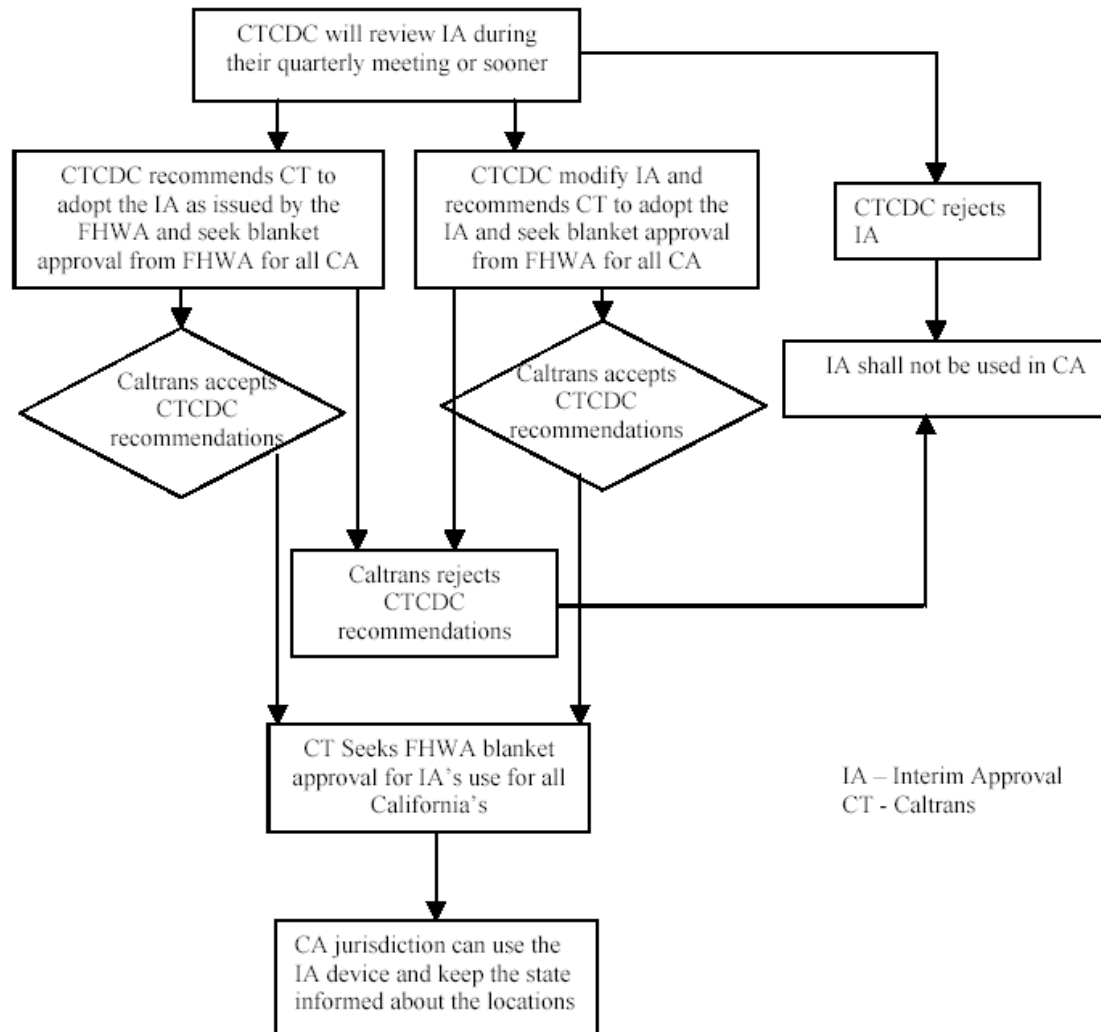
It is in compliance with the ADA requirement / guidelines.

The language including a "Shall" provide a design uniformity and consistency for all Pedestrian Push Buttons installations

The CAMUTCD language for "an approximate height" would open door for various height installation pending Contractors' interpretation, specifically with the lack of percentage generated due to the use of word "approximate".

07-13 Experimental Process With New Traffic Control Devices

Example of Process for Requesting and Conducting Experimentations
for New Traffic Control Devices in California

07-14 Process to Adopt Interim Approvals in California Issued by the FHWA**Example of Process for the Use of an Traffic Control Devices
in California Approved as on Interim Approval (IA) by the HHWA**

07-15 Proposal to Adopt "Safety Awareness Zone Next XX Miles" Sign**Background:**

97.01. The following segments are eligible for designation as Safety Awareness Zones pursuant to

97.02. Section 97.1:

(a) The Golden Gate Bridge.

97.1. (a) A highway segment shall be designated as a Safety Awareness Zone if the all the following conditions have been met:

(1) The highway segment is eligible for designation under Section 97.01.

(2) Each local governing body or bodies, with jurisdiction over the area or areas in which the eligible segment is located, has adopted a resolution indicating its support for the designation as well as a Safety Awareness Zone Plan addressing education, enforcement, and engineering measures intended to support the designation.

(3) If the highway segment is a state highway, the Safety Awareness Zone Plan has been approved by the Director of Transportation and the Commissioner of the Department of the California Highway Patrol.

(b) A Safety Awareness Zone designation shall be deemed effective immediately upon satisfaction of all requirements pursuant to subdivision (a) and may remain in effect for a period not to exceed three years from the effective date. The designation may be renewed for a period not to exceed three years. Renewal of a designation for a highway segment that is a state highway shall require the approval by the Director of Transportation and the Commissioner of the Department of the California Highway Patrol of an updated Safety Awareness Zone Plan.

(c) The department shall develop a sign to notify motorists of the presence of a Safety Awareness Zone, and shall place and maintain the signs for as long as the designation is in effect pursuant to this section.

(d) Presence of a Safety Awareness Zone does not increase the civil liability of the state or local authority having jurisdiction over the highway segment under Division 3.6 (commencing with Section 810) of Title 1 of the Government Code or any other provision of law relating to civil liability.

(e) Projects on a highway segment specified as a Safety Awareness Zone shall not be elevated in priority for state funding purposes.

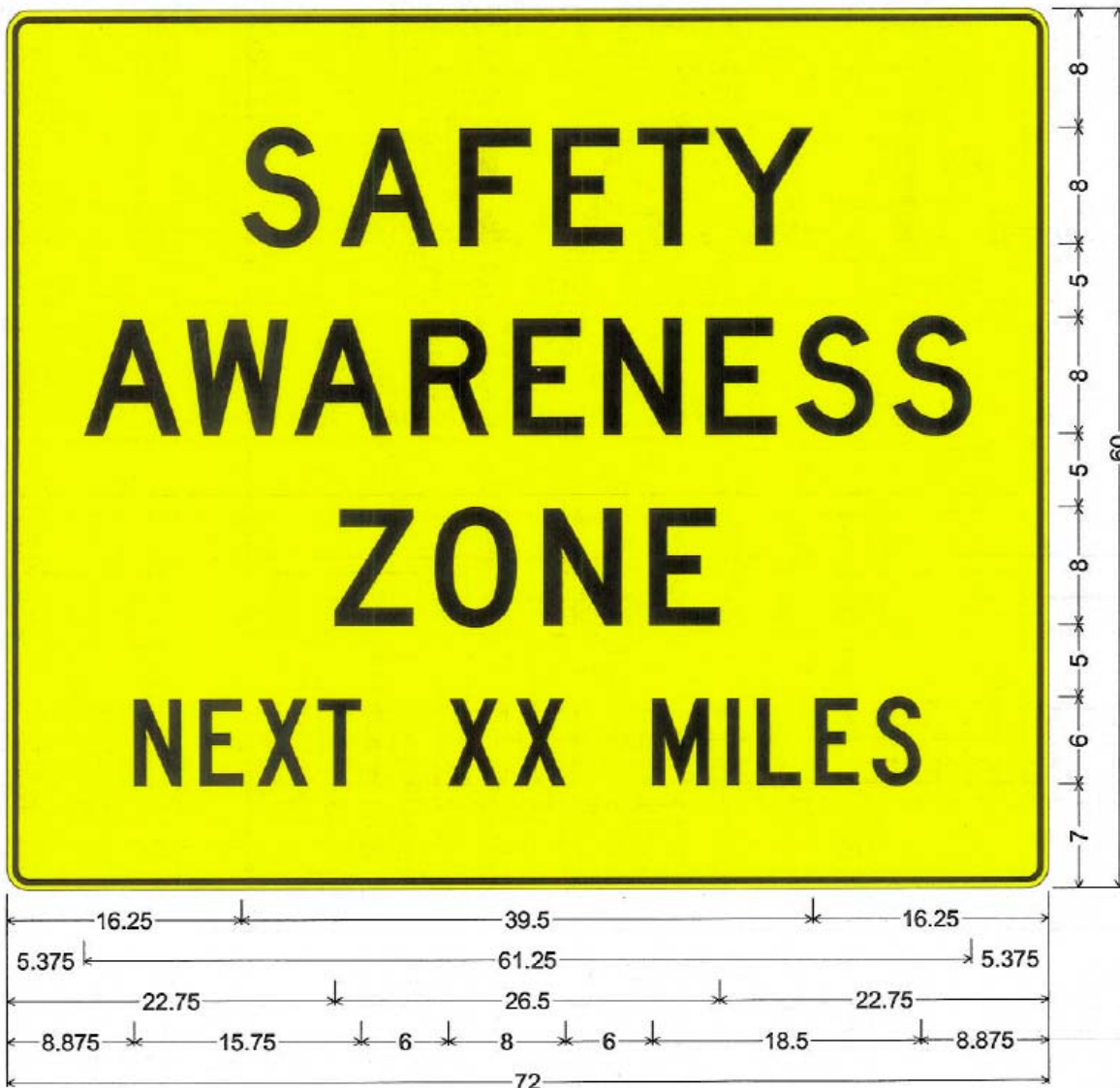
(f) For purposes of this section, "highway" has the meaning set forth in Section 360 of the Vehicle Code.

97.4. (a) The segment of county highway known as Vasco Road, between the Interstate 580 junction in Alameda County and the Walnut Boulevard intersection in Contra Costa County, shall be designated as a Safety Enhancement-Double Fine Zone upon the approval of resolutions in that regard by the Alameda and Contra Costa County Boards of Supervisors.

(b) This section shall remain in effect only until January 1, 2010, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2010, deletes or extends that date.

The following two signs are for the CTCDC to review and recommend which one to adopt. The Committee could recommend different version:

DRAFT - Option 1

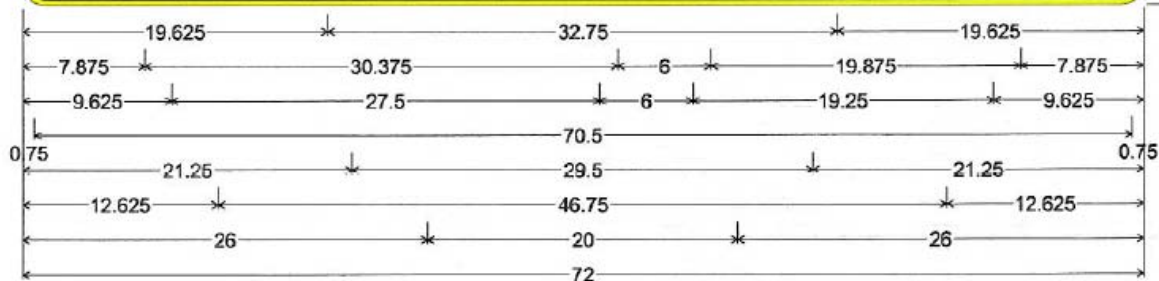


1.500" Radius, 0.375" Border, 0.375" Indent, Black on Yellow;

"SAFETY" D; "AWARENESS" D 90% spacing; "ZONE" D; "NEXT XX MILES" C;

**SPECIAL
DRIVING ZONE
BEGINS HERE**

**SAFETY
AWARENESS
ZONE**



"SPECIAL" D; "DRIVING ZONE" D; "BEGINS HERE" D; "SAFETY" D; "AWARENESS" D; "ZONE" D;

07-16 SB 848, as Amended, Corbett. Vehicles: Engineering and Traffic Survey: Speed Trap.

A discussion package for this item is included as an **Attachment “Agenda Item 07-16 – SB848.”**

07-17 Proposal for C17A (CA) ROAD WORK Plaque**C17A (CA)****Proposal for C17A (CA) ROAD WORK Plaque:**

This plaque is mounted above the R2-1 Speed Limit Sign for application on State highways, freeways; and, on multi-lane urban arterial roadways where the 24" x 24" C17 (CA) is too small.

Per CVC 22362, Section 6F.104(CA) Road Work/Speed Limit Sign (C17(CA)):

Standard: (Current Policy)

The Road Work/Speed Limit Sign (C17(CA)) sign shall not be used on State highways.

Option: (Proposed Addition)

Jurisdictions may use the Road Work/Speed Limit C17 (CA) sign to establish reduced Road Work/Speed Limit areas on local streets and roads. However, on multi-lane urban arterial roadways and on State highways, appropriate size ROAD WORK (C17A (CA)) plaque mounted above the Speed Limit (R2-1) sign may be used in combination to establish reduced Road Work/Speed Limit areas, when workers are present.

On State highways, ROAD WORK (C17A (CA)) plaque in combination with Speed Limit (R2-1); and, End Speed Limit R3 (CA) signs may provide reduced speed limits within the work zone for the protection of workers, and public safety, if the following conditions are met:

1. A Construction Engineer observes prevailing vehicle speeds within the construction zone that create a risk for workers, and public safety; and, the Engineer requests reduced Road Work/Speed Limit areas be established within the project limits, when workers are present.
2. The District Traffic Engineer, or their designee, analyzes prevailing speeds through the construction zone; and, after consultation with the District Construction Engineer and the California Highway Patrol, and/or local law enforcement, they develop consensus to establish a reduced Road Work/Speed Limit area, when workers are present. The reduced Road Work/Speed Limit is jointly agreed upon in writing by the District Traffic Engineer and the District Construction Engineer, or their designees, for a reduced Road Work/Speed Limit for a reduction of the posted speed limit.
3. The reduced speed limit may be established 10 miles per hour below the existing posted speed limit; and, no less than 25 miles per hour.

4. The reduced Road Work/Speed Limit is posted a minimum distance of 400 feet in advance of where, and when workers are present; and, the W3-5 Speed Limit Ahead, or, R2-4 (CA) reduced speed limit Zone Ahead sign informs road users of the reduced Road Work/Speed Limit area.
5. Contracted law enforcement provides Construction Zone Enhanced Enforcement in the work zone; and, cites violators of the reduced, prima facie Road Work/Speed Limit under the Basic Speed Law (CVC 22500) without the use of radar enforcement or other electronic methods.
6. ROAD WORK (C17A (CA)) plaque in combination with the Speed Limit (R2-1), and End Speed Limit R3(CA) sign are placed for use during working hours and removed, or, covered during non-working hours on State Highways.

C17A (CA) in combination with R2-1 sign



07-18 Proposal to Amend FWY Detour With Arrow Sign SC9 (CA) and Adopt Exit With Arrow Sign

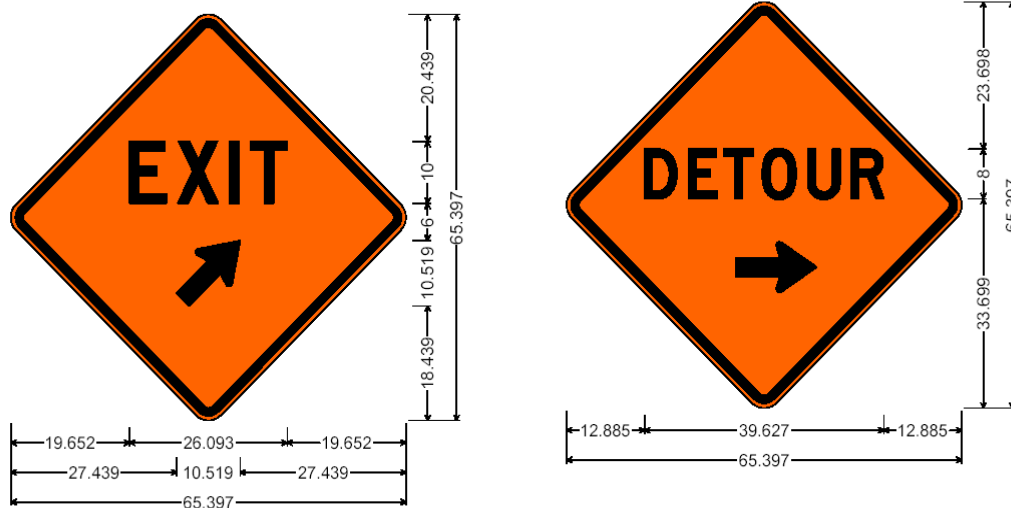
Currently in the CAMUTCD we have an approved sign FWY DETOUR with Arrow (SC9(CA)). It is very useful in a work zone that utilizes detour. It has a removable arrow that can be mounted to point any direction needed. It gives clear directions to the traffic as where to go. However, this sign is limited to size of 36"X36". Also it won't be fitting if the detour is not setup for Freeways.

We are proposing to change the SC9(CA) Sign to DETOUR with Arrow sign. Two changes will be made. 1. Message modifications: The sign will have the message "DETOUR" with "FWY" as an option. 2. Size modification: The sign will be available in both 36"X36" and 48"X48".

The Current policy states (Proposed to Delete):

CAMUTCD Section 6F.53. ~~"Guidance: The FWY DETOUR with Arrow (SC9(CA)) sign should be used to inform motorists of the direction to follow for a freeway detour."~~

The new policy will state: "Guidance: The DETOUR with Arrow (SC9(CA)) sign should be used to inform motorists of the direction to follow for a detour. The words FWY DETOUR may be substituted for DETOUR, where applicable"



Sign code TBD

SC9(CA)

Proposed EXIT with Arrow Sign (Sign code TBD)

Caltrans' contractors has been using a diamond shaped EXIT with Arrow sign with great success. It is very similar in specifications and usage with the DETOUR with Arrow sign. It also has a removable arrow that can be mounted to point any direction needed. It informs motorists of the direction to follow for a freeway exit inside of a work zone. It will only be available in the size of 48"X48"

This new policy will be added to Section 6F.28 of the CAMUTCD: "Guidance: The EXIT with Arrow (SC**(CA)) sign should be used to inform motorists of the direction to follow for a freeway exit within a work zone."

Experiment Requests:**03-14 Numbering of Signalized Intersections**

Coachella Valley Association of Governments (CVAG) obtained approval from the CTCDC on September 13, 2003 to conduct experiment with numbering on signalized intersection. CVAG has submitted two preliminary reports and a final report on the experiment. The numbering system was a successful concept, embraced by the affected jurisdictions and the tourist oriented organizations for which it was originally proposed. CVAG requesting CTCDC to accept their conclusion and allow continuous use of the numbering system in the Coachella Valley.



Palm Springs Desert Resorts

CONVENTION AND VISITORS AUTHORITY

January 29, 2007

Mr. Farhad Mansourian
Chairman
California Traffic Control Devices Committee (CTCDC)
c/o Coachella Valley Association of Governments (CVAG)
73-710 Fred Waring Drive, Suite 200
Palm Desert, CA 92260

Dear Mr. Mansourian,

As chairman of the Palm Springs Desert Resort Communities Convention and Visitors Authority Hospitality Industry and Business Council, I want to thank the CTCDC for their continued support and commitment to the program placing non-standard signs on the signal poles on the State Highway portion of Highway 111.

These signs help our visitors easily find many of our Coachella Valley hospitality industry businesses. As you know, hospitality industry economic impact flows throughout our Valley and Highway 111 is our primary traffic artery. The non-standard numbered signs are a huge benefit and integral component of our traffic flow system.

The Coachella Valley business community encourages your committee's continued support to maintain this program. Thank you.

Sincerely,

Aftab Dada
Chairman, HIBC

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Palm Springs Desert Resorts
CONVENTION AND VISITORS AUTHORITY

TO: California Traffic Control Devices Committee (CTCDC)

FROM: Jeff B. Beckelman, President & CEO 
Palm Springs Desert Resort Communities
Convention and Visitor's Authority (PSDRCCVA)

DATE: January 29, 2007

SUBJECT: Recommendation regarding final report on non-standard
Signs on the signal poles on the State Highway portion
of Highway 111.

In a previous report submitted on June 27, 2006, I provided you with information regarding the positive effect we are realizing for our visitors and membership businesses from the non-standard signs on the signal poles on the State Highway portion of Highway 111. These numbered signs are prominently displayed in our Desert Guide, which provides easy directional service. I have enclosed several copies of the Guide. Please refer to the center map pull-out.

Also attached is a letter from Aftab Dada, Chairman of the CVA's Hospitality Industry and Business Council, further supporting the continuation of this program.

As President and CEO of the PSDRCCVA and representing our organization, I ask that you take action to continue the non-standard sign program. The CVA working with the Desert Communities and the State will coordinate the program maintenance and new sign additions.

Thank you for your continued interest and we appreciate your help in making it easier for our visitors to navigate throughout the Coachella Valley.

**COACHELLA VALLEY ASSOCIATION of GOVERNMENTS**

Blythe • Cathedral City • Coachella • Desert Hot Springs • Indian Wells • Indio • La Quinta • Palm Desert • Palm Springs • Rancho Mirage
County of Riverside • Agua Caliente Band of Cahuilla Indians • Cabazon Band of Mission Indians • Torres Martinez Desert Cahuilla Indians

February 5, 2007

Devinder Singh
Executive Secretary for the CTCDC-MS 36
California Department of Transportation
P.O. Box 94284
Sacramento, CA 94274-0001

Subject: Number Signs on Highway 111 Signal Poles

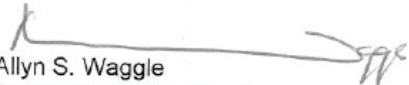
Dear Devinder:

As you requested during our telephone call last week, by this letter I am hereby reporting to the California Traffic Control Devices Committee that the project to test the effectiveness and prospective use of the number signs which CVAG arranged to have placed on all the traffic signal poles on Highway 111 through the several cities of the Coachella Valley is now considered complete. As the documentation we have previously sent you, and additional information which I am enclosing today, will attest, the project has been embraced by the affected jurisdictions and the tourist oriented organizations for which it was originally proposed and has been a great success. The Highway 111 Signal Signs Project has been every bit as effective as planned and we request that the signs be allowed to remain permanently in the remaining Caltrans right of way.

The items enclosed today include supporting correspondence for our request from the Palm Springs Desert Resort Communities Convention and Visitor's Authority and the Hospitality Industry and Business Council of the Coachella Valley. I am also sending you several copies of the most recent distribution of the Palm Springs Life Desert Guide, a circular to desert visitors, which prominently shows off the Highway 111 Signal Signs program as a guide to visitors in the center fold-out section.

I trust this information will be sufficient for the CTCDC to take action to approve our request at your next meeting. Should you have any questions, or require anything further, please contact me. I will appreciate being noticed of this item being agendized for action by the CTCDC.

Very truly yours,


Allyn S. Waggle
Deputy Executive Director

xc: John M. Wohlmuth, Executive Director, CVAG
Terry Henderson, City of La Quinta
Jeff B. Beckelman, PSDRCCVA

00-3 Engine Brake Sign

During the August 2000 CTCDC meeting, City of Auburn was authorized to conduct experiment with **“Truckers Easy On the Engine Brake.”** The City of Auburn submitted a final report and the report was discussed during the December 2002 CTCDC meeting. Gerry Meis, Sponsor, of the item stated that the Police Department conducted random interviews of people who live in the immediate area of Route 80 and Route 49 which is most affected by traffic noise. Half of the individuals interviewed said that the noise from engine brakes was about the same, and the other half said the noise was less. The pre and post noise data indicated a reduction in the noise level. Gerry suggested that the item be tabled until more data is available for the committee to make a final decision. Other agencies have shown interest in installing this sign on an experimental basis. There were few inquiries about the status of the sign, however, none of the agencies asked approval to conduct further study on the sign.

Since no other agency came forward to do further experimentation with this sign, Caltrans would like to get opinion from the Committee members for further course of action.

07-19 Wildlife Corridor Signage

DEPARTMENT OF PUBLIC WORKS

FLOOD CONTROL • SOLID WASTE MGMT • SURVEYOR • TRANSPORTATION

COUNTY OF SAN BERNARDINO
PUBLIC AND SUPPORT
SERVICES GROUP825 East Third Street • San Bernardino, CA 92415-0835 • (909) 387-8104
Fax (909) 387-8130VANA R. OLSON
Director of Public Works

February 12, 2007

Devinder Singh
Senior Transportation Engineer
Executive Secretary, CTCDC
1120 N Street MS36
Sacramento, CA 95814**RE: Wildlife Corridor Signage**

Dear Mr. Singh,

The County of San Bernardino would like to sponsor the application for requesting and conducting experimentation for the Wildlife Corridor signs that will be presented in the next California Traffic Control Devices Committee (CTCDC) quarterly meeting. The "FRIEND OF THE MOUNTAIN, INC." will perform the presentation.

We appreciate your cooperation in scheduling this item for the next CTCDC meeting. Should you have any questions or desire more information, please call me at (909) 387-8186

Sincerely,

JACOB Y. BABICO, P.E.
Chief, Traffic Division

JYB/cc

Cc: Danielle Borish, Field Representative to 3rd District
Carol Pedder, President – Friends of the Mountain, Inc.
VRO/MK-RFMARK H. UFFER
County Administrative OfficerNORMAN A. KANOLD
Assistant County Administrator

Board of Supervisors			
BRAD MITZELFELT	First District	DENNIS HANSBERGER	Third District
PAUL BIANE	Second District	GARY C. OVITT	Fourth District

FRIENDS OF THE MOUNTAIN, INC.

P.O. Box 490 Rim Forest, California 92378 Phone (909) 744-9696
friendsofthemountain@charter.net

Devinder Singh
Senior Transportation Engineer
Executive Secretary, CTCDC
1120 N Street MS36
Sacramento, CA 95814

May 5, 2005

Re: CTCDC Application for Experimental Signs

Dear Mr. Singh,

We are proposing the installation of *Wildlife Corridor Signs* to be placed on the highways and roadways of San Bernardino County.

These signs will help to promote traffic safety, public safety and the safety of the wildlife in these areas by raising the awareness of the public regarding the presence of wildlife in this region.

Yucaipa Animal Protection, Moonridge Zoo and Friends of the Mountain will collectively oversee The *Wildlife Corridor Sign* project and it will be implemented by the County of San Bernardino. We have been working closely with Danielle Borish, Field Representative of Third District Supervisor Dennis Hansberger's office.

Enclosed you will find the CTCDC Application completed as detailed as I can make it until I speak with you. Also I have included a list showing contents of Application packet, an overview detailing the project by Kandie Cansler, Wildlife Rehabilitation Coordinator Region Six Calif. Dept. of Fish and Game, support letters from Danielle Borish, Field Representative for San Bernardino County 3rd District Supervisor Dennis Hansberger, California Department of Fish and Game and The United States Forest Service. Also attached are actual photos of the signs being used in the City of Yucaipa.

If you need further information please contact me by phone or email.

Thank you for your consideration of this project.

Very Truly yours,



Carol Pedder, President

Revised copy 4/5/06

WILDLIFE CORRIDOR SIGN PROGRAM

Overview as of 2005 – 2006

The Wildlife Corridor Sign Program is committed to promoting traffic safety, fostering the preservation of wildlife that competes for space in areas of urban development and was created to enhance and also to put into practice an alternative way to deal with our wildlife in the Yucaipa and Calimesa areas who believe that wildlife and its habitat are a natural and important part of our urban neighborhoods and can co-exist in harmony. Both communities have endorsed and are implementing the Wildlife Corridor Sign Program, by education and bringing awareness to the public. Allowing a choice on how to handle the wildlife issues, a choice whether to call the California Department of Fish and Game or the Wildlife Corridor Sign Program. This program in the beginning was started in part by the CPUW (Citizens for the Protection of Urban Wildlife), and now has blossomed into the Wildlife Corridor Sign Program. Designed to be a very simple program, education and information, with a pro-active approach to integrate our wildlife into our urban sprawl with the least amount of impact to either.

The Wildlife Corridor Sign Program is designed by Yucaipa Animal Placement Society, operated by a volunteer base of committed, respected individuals approved by the Dept. of Fish and Game in each of the outlined areas. This is the first program endorsed, recommended and embraced by the Dept. of Fish and Game as a way to keep our people and wildlife safe, by educating first, providing the approved information to the public, troubleshooting the problem on site, then if all efforts have failed to have the Dept. of Fish and Game administer the appropriate humane ending for the animal without compromising public safety. With any and all calls of importance, the Dept. of Fish and Game will be informed of the situation. The Wildlife Corridor Program will not, nor do we intend to interfere with the work of the Dept. of Fish and Game, only to work with the Dept. to benefit the wildlife in our areas.

Each area that implements the sign program would be affiliated with someone in that given area who is qualified to handle the incoming calls and they would either deal with the situation or forward it on to the appropriate officials of that community, Fish and Game or both.

The Wildlife Corridor Sign Program has no position on growth, environment or any other related issues. Our only mission and goal is to find ways through education and information to protect our ever declining wildlife species in our area by bringing awareness in the form of our Wildlife Corridor Signs which provides alternative information while celebrating our natural habitat.

The Goal of The Wildlife Corridor Program:

Install the Wildlife Corridor Signs in all areas where human to wildlife encounters may occur. In the case of the City of Yucaipa, Wildlife Corridor Maps were consulted in conjunction with current City Maps then locations were chosen for sign placement where new and existing housing encountered areas where wildlife is known to exist, or simply pass through.

The option is then made available to the public who either live or are using the area for recreation, to contact one of the numbers on the signs to report a problem animal, ask a question concerning a situation in their neighborhood regarding exclusionary techniques etc. The results thus far have been well received by the public. They appreciate the effort to inform them as well as protect the wildlife.

Sincerely, Kandie Cansler
Wildlife Rehabilitator Co-Ordinator Region Six Calif. Dept. Fish and Game

**Board of Supervisors
County of San Bernardino**



DENNIS HANSBERGER
SUPERVISOR, THIRD DISTRICT

May 5, 2006

Mr. Devinder Singh, CTCDC
Senior Transportation Engineer
Executive Secretary, CTCDC
1120 N. Street, MS36
Sacramento, CA 95814

RE: WILDLIFE CORRIDOR SIGNS

Dear Mr. Singh,

My name is Danielle Borish, Field Representative to Dennis Hansberger, Third District Supervisor of San Bernardino County.

The Supervisor recently met with a non-profit organization called Friends of the Mountain, directed by Carol Pedder. The intention of the organization is to work for the common good of the mountain by protecting its residents, visitors, wildlife, and of course the environment.

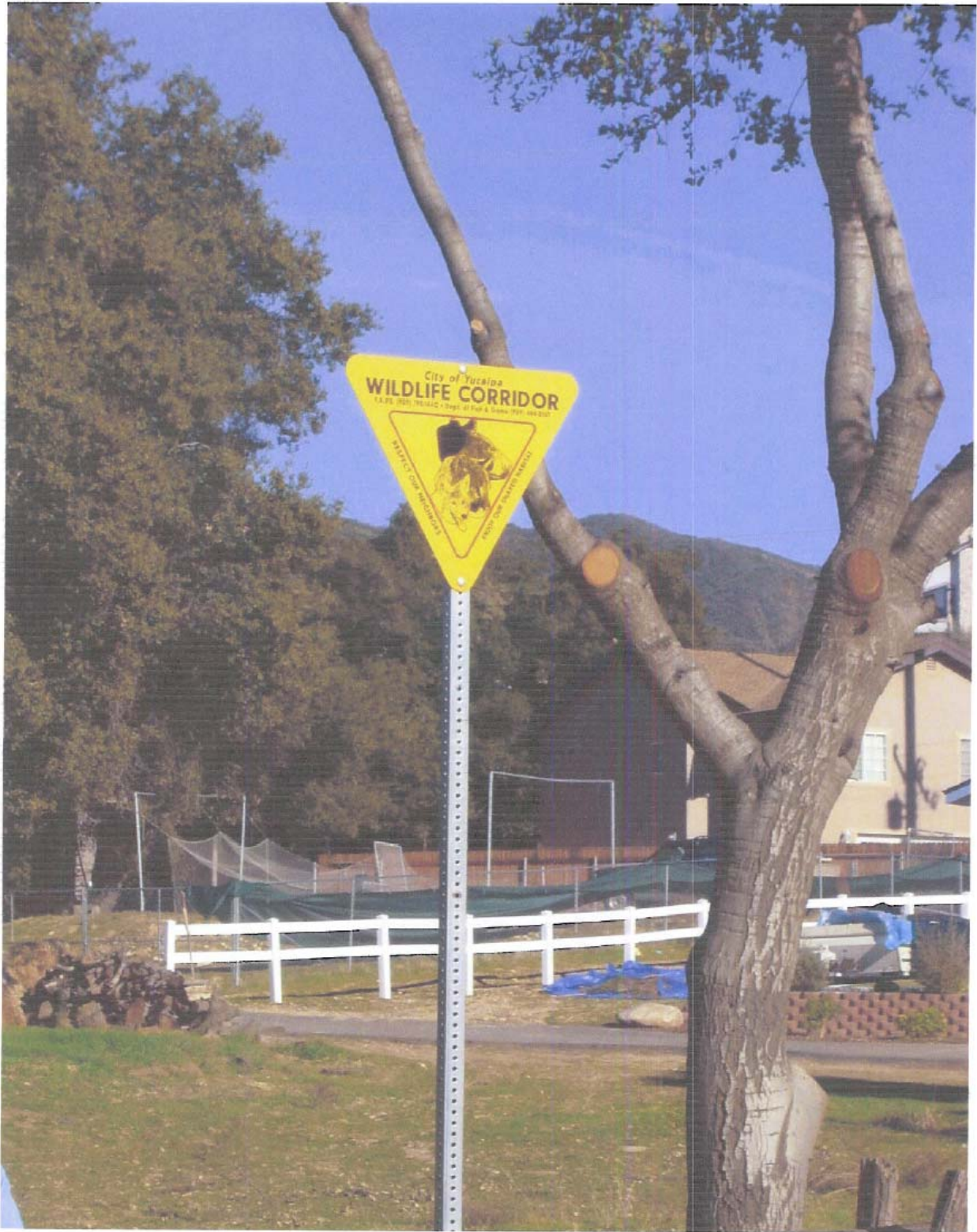
The first major project brought forth by Friends of the Mountain, is the strategic placement of wildlife corridor signs throughout San Bernardino County. The purpose of these signs is to protect the public as well as the wildlife.

These signs will inform members of the public, specifically nearby homeowners, hikers, and tourists that animals such as bears, mountain lions, and coyotes frequent these areas. The signs also remind people to be aware of their surroundings and respectful of the environment. In the event a concerned passerby has a question or concern, the signs will have California's Fish and Game and Yucaipa's Animal Placement Society contact information.

Supervisor Hansberger is supportive of this project, as it is his intent to protect the mountain communities. On behalf of Supervisor Hansberger, I solicit your views on the matter and hope you will give consideration to the application before you.

Sincerely,
Danielle Borish
Field Representative





07-20 Request for Permission to Experiment with “Hawk” Traffic Control Devices

April 17, 2007

Mr. Devinder Singh
CTCDC Executive Secretary
Devinder_singh@dot.ca.gov

RE: Request for Permission to Experiment with “HAWK” Traffic Control Device

Dear Mr. Singh:

The City of Emeryville requests permission from CTCDC to experiment with a new innovative type of traffic control device to enhance bicycle/pedestrian crossing safety and efficiency. A parallel request to experiment is being submitted to FHWA. This new traffic control device, HAWK, “High Intensity Activated crossWalk” beacon signal is currently deployed in City of Tucson, Arizona on an experimental basis. City of Tucson has installed over 51 HAWK signals with approval from Federal Highway Administration (FHWA). FHWA’s approval for the City of Tucson to experiment with HAWK signal is attached.

Introduction

Many drivers fail to stop or yield to pedestrians attempting to cross streets even though State laws require them to do so. Many different pedestrian traffic control devices and treatments have been deployed to help improve safety of pedestrian crossings across the country with limited success. Specifically, City of Emeryville has deployed in-road warning beacons at crosswalks with limited driver compliance.

City of Tucson has been recognized in successfully deploying innovative traffic control techniques that improved pedestrian crossing safety and efficiency. Building on the City of Tucson’s HAWK signal knowledge and experience, the City of Emeryville wants to test this innovative traffic control device on a city intersection crossing.

HAWK Signal Description

The HAWK signal uses traditional traffic and pedestrian signal heads but in a different configuration, **Figure 1**. In the absence of a pedestrian actuation, the HAWK signal indication for main street vehicles is *blank*, meaning that the signal heads are not illuminated. If present, side street vehicle traffic movement is controlled by a conventional stop sign. Once a pedestrian places a call to the signal, the HAWK signal shortly switches to a flashing *yellow* (FY) indication to alert the driver that a pedestrian is waiting to cross. The HAWK signal then goes through a sequence of *yellow* (Y), *red* (R), and *pedestrian walk* (W) phases, just as a conventional signal would. However, once the

pedestrian signal indication switches to *flashing don't walk* (FDW) the vehicle indication on the main street becomes a *flashing red* (FR). Similar to the flashing red indication signalized intersection in 'flashing mode', drivers need to stop and give the right-of-way to the conflicting traffic stream, in this case the crossing pedestrians. After the pedestrian has left the crosswalk, vehicles can proceed with caution and do not have to wait for entire FDW clearance interval to elapse as they would at a conventional signal. From pedestrian perspective, the sequences of a conventional signal and a HAWK signal are identical. Phasing Sequences Comparison of 'Conventional' and 'HAWK' signal is shown in Figure 2. A HAWK signal operation video is posted on <http://dot.tucsonaz.gov/traffic/HAWK.wmv>.

Figure 1: HAWK Signal



Figure 2: Phasing Sequences Comparison of 'Conventional' and 'HAWK' signals

Conventional Signal		HAWK Signal	
VEHICLES	PEDESTRIANS	VEHICLES	PEDESTRIANS
G	DW	blank	DW
G	DW	FY	DW
Y	DW	Y	DW
R	DW	R	DW
R	W	R	W
R	FDW	FR	FDW
R	DW	FR	DW
G	DW	blank	DW

Pedestrian Actuation →

HAWK Signal Benefits

The following are benefits of the HAWK signal:

1. Motorists would not be accustomed to the HAWK signal indications like a typical traffic signal because vehicle indications are only illuminated during pedestrian crossing sequence. This creates a greater awareness of bicycle and pedestrian crossings when the signal is activated.
2. Vehicle traffic are delayed less than a typical traffic signal because vehicles may proceed through the intersection on flashing red indications during the pedestrian flashing "Don't Walk" sequence.

3. HAWK signal provides a controlled crossing at an intersection without requiring full traffic signalization.
4. The lack of vehicle traffic signal control on the side street does not attract more traffic to the intersection as conventional signals would.
5. The City of Tucson has documented improved pedestrian safety from installation of 51 HAWK signals.
6. Two independent studies, Improving Pedestrian Safety at Unsignalized Roadway Crossings, Transit Cooperative Research Program/National Cooperative Highway Research Program, D-08/3071 and Road Safety Audit of Six "HAWK" Crossing Sites, FHWA Road Safety Audit, Contract DTFH61-03-D00150 have found the HAWK signal presents a low risk of safety problems or operational concerns.

City of Emeryville Project Site

Powell Street and Doyle Street intersection is located in the City of Emeryville. Powell Street is a four-lane east/west roadway that connects I-80 freeway with San Pablo Avenue. The posted speed limit is 35mph on Powell Street. Powell Street experiences high volume through traffic during the PM peak hour period. Doyle Street is a two-lane residential street. Doyle Street has a posted speed limit of 25mph. On-street parking is located on both sides of Doyle Street. Doyle Street is a City designated bicycle route. Powell Street and Doyle Street intersection currently has stop sign control only for the side street traffic on Doyle Street. Crosswalks are present on all intersection approaches.

A residential housing development project is planned on a nearby site just south of the intersection. The City foresees pedestrian and bicycle crossing activities would increase at the intersection of Powell Street and Doyle Street. With high volume uncontrolled vehicular traffic on Powell Street, the expected increase in pedestrian and bicyclist traffic would likely find difficulty obtaining adequate gaps in traffic to cross the street during peak traffic hours.

The City wishes to deploy a test HAWK signal at this location to enhance pedestrian and bicycle crossing safety and efficiency while minimizing disruption to Powell Street traffic.

Project Schedule

If the HAWK signal project is approved by both FHWA and CTCDC, the City plans to test the HAWK signal for a three year period. The following is the City's estimated project schedule.

HAWK Signal Project Schedule

Project Task	Date
Submit HAWK signal plans for review	Fall 2007
HAWK signal city announcement/fact sheet	Summer 2008
Engage local bicycling group for public education	Fall 2008
HAWK signal activation	Fall 2008
Informal bicycle survey	Winter 2008
Sampling of compliance	Winter 2008
Main street traffic queue delay study	Winter 2008
Prepare CTCDC status report	Winter 2008
Informal bicycle survey	Summer 2009
Sampling of compliance	Summer 2009
Main street traffic queue delay study	Summer 2009
Prepare CTCDC status report	Summer 2009
Informal bicycle survey	Summer 2010
Sampling of compliance	Summer 2010
Main street traffic queue delay study	Summer 2010
Prepare CTCDC status report	Summer 2010
CTCDC Final Study	Fall 2010

HAWK signal plans and signal timing parameters will be submitted to CTCDC for review and comment preceding signal construction.

Prior to activation of the HAWK signal, the City will prepare fact sheet for public announcement and engage the local bicycling group for public education.

The City will gather data at the test site through informal surveys, samplings of driver compliance, sampling of bicyclist/pedestrian compliance, traffic queue delay studies, and collect accident for the duration of the test period.

Annual project status reports will be prepared and submitted to the CTCDC committee for review. A final study will be conducted at the end of the project to summarize findings and document any measurable benefits. Some of key success measures such as driver compliance, bicyclist/pedestrian compliance, traffic delays, and operational issues will be documented in the final report.

If FHWA, CTCDC, or the City finds the HAWK signal creates a safety problem that can not be rectified during the testing period, the City will shut down its operation. The HAWK signal will be removed, and a standard traffic control device will be installed in its place.

If the final study outcome demonstrates measurable benefits and low risk of safety problems or operational concerns, the City would then request permanent installation status of the HAWK signal. However, the City is prepared to remove the test HAWK signal at the end of the test period.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Maurice Kaufman". The signature is fluid and cursive, with the first name "Maurice" being more prominent than the last name "Kaufman".

Maurice Kaufman
Department of Public Works
City of Emeryville

Attachment

01-4 Tactile Pedestrian Indicator With Audible Information

The City of Santa Cruz installed the pedestrian indicator with audible devices on highway I with local streets. The City has submitted one preliminary report on December 10, 2001 and subsequent to that there was no update provided by the City. However, on May 20, 2004, Caltrans adopted the California Supplement along with MUTCD and these devices were adopted officially in California. Since, the devices has been adopted in California officially, staff request to the Committee to make recommendation to remove this item from the "On-going Experimentation" list. The following message was received from the City of Santa Cruz:

"Christophe Schneider" <CSchneider@ci.santa-cruz.ca.us>

04/19/2007 04:45 PM

To <devinder_singh@dot.ca.gov>

cc

Subject Audible pedestrian signals for vision impaired persons

Mr. Singh,

Thank you for providing the information on the City's original request for the audible pedestrian devices on Mission Street/State Route 1, as a test location. Due to the departure of the Traffic Engineer following the installation and limited staffing since that time, the department was not able to complete the final report. I agree that the MUTCD adequately addresses our original request and that this item does not need to be scheduled for the CTCDC. I hope this email is adequate to closeout this issue. Please contact me if you need additional information.

Sincerely,
Christophe J. Schneider
Assistant Director/City Engineer
City of Santa Cruz Public Works
831-420- 5422

7 Discussion Items:**07-21 Proposal to Install Audible Features at the Uncontrolled Crosswalk**

CITY OF ESCALON

ENGINEERING/PUBLIC WORKS

1854 Main Street / P.O. Box 248 • Escalon, California 95320 • Office 209.838.4115 Fax 209.838.1927

CTCDC Secretary,

The City of Escalon is applying to have Polara Engineering Inc. model XAV Pedestrian Stations installed at the existing In Roadway Lighting (IRWL) crosswalk near Elizabeth Ave in Escalon.

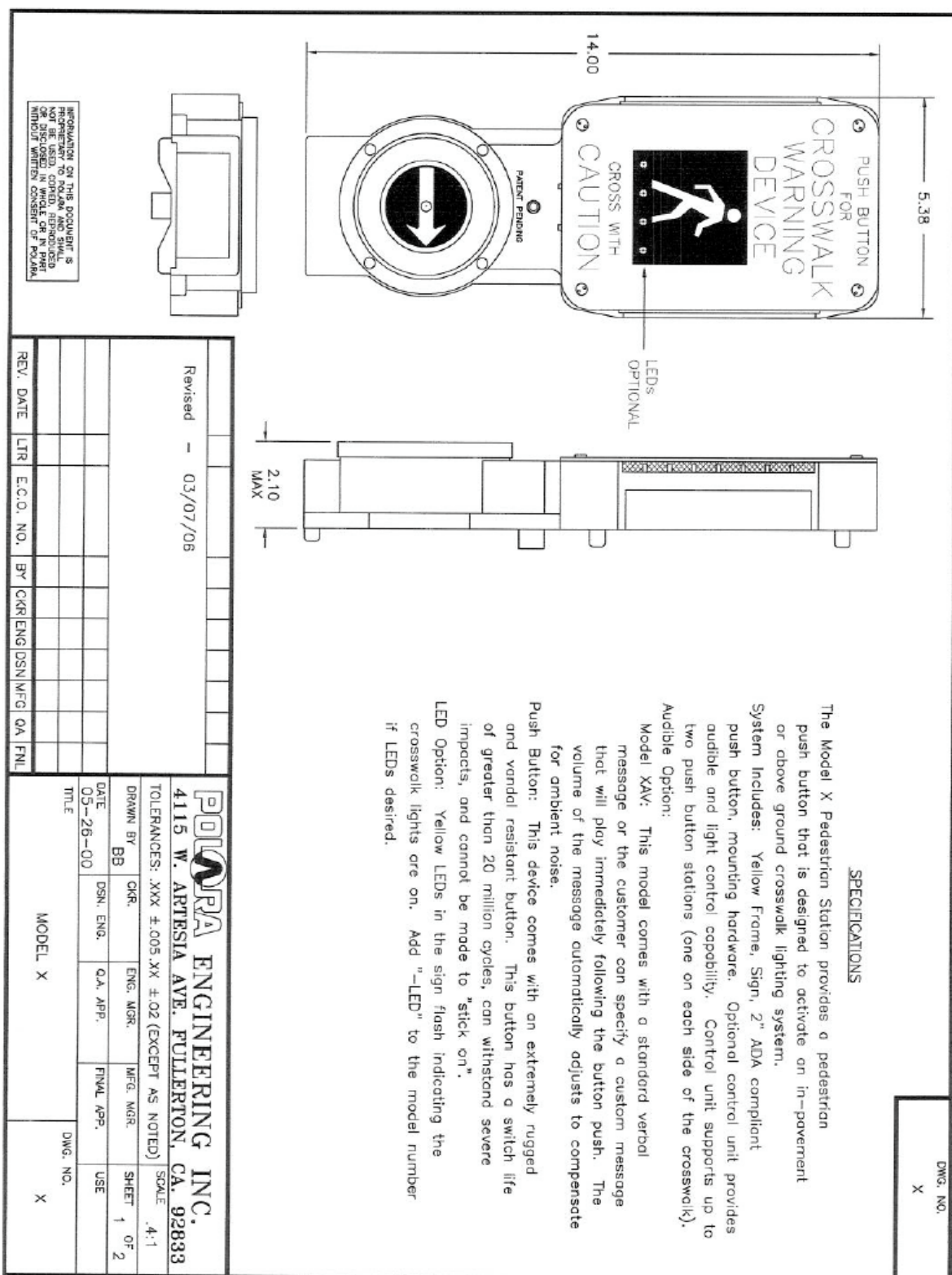
A group consisting of seven visually impaired individuals has requested the modification. This crosswalk is the only highway crossing in the nearby vicinity to access stores and other important facilities. Currently there are no audible features installed so the visually impaired have no confirmation that the crosswalk lights have been activated. Some have to call Dial-A-Ride simply to cross the street safely.

The installation would include two Polara Engineering Inc. model XAV Pedestrian Stations. These have a verbal message feature that would be something to the effect of "Crosswalk activated. Proceed with caution. Vehicles may not stop". These new stations would replace the existing pedestrian stations in the same locations. Only the head is changed along with the necessary wiring.

These devices are in use and having a positive impact on roads with speed limits as high as 45 mph in Modesto and in Stockton. No safety problems arose from their installations. We are hoping for a permanent installation due to the training involved for the impaired and the cost of the install.

Sincerely,

Phillip Tapia
Engineering Technician II
City of Escalon
1854 Main Street
Escalon, CA 95320
(209) 838-4115
(209) 838-1927 Fax



DWG. NO. <div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">X</div>				
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>Control Unit for Model XAV</p> <p>Power Requirements: 115 VAC, 60Hz, 0.1A</p> <p>Audio Amplifier Power Output: 10W RMS, into 8Ω.</p> <p>Volume Control: On board trimming potentiometer for overall adjustment.</p> <p>Volume Control Automatic Adjustment Range: 45dB</p> <p>Microphone for Ambient Noise: Frequency Range: 100Hz to 8kHz</p> <p>On board sensitivity adjustment.</p> <p>Ped Push Button Interface: Connects between pushbuttons and flash control system. Provides contact closure output.</p> <p>Jumper Selectable Options: Two jumpers configure the message to be repeated one, two, three or four times.</p> <p>LTS IN: Connects to field lighting. Sound output inhibited until voltage appears on LTS IN.</p> <p>Input Range: 10–130 volts AC/DC – Use jumper for < 50 volts.</p> <p>LED OUT: Connects to LED IN on Push Button Station. Flashes sign LEDs in sync with signal on LTS IN. 15VDC, .25A Max.</p> <p>Dimensions: L6" x W4$\frac{3}{8}$" x H1$\frac{1}{2}$"</p> <p>Mounting: Mounts inside cabinet that houses crosswalk lighting control system or can be mounted in a separate external mounting box.</p> <p>Voice Message: A message up to 16 seconds long that can play immediately following a button push.</p> <p>Push Button Station:</p> <p style="margin-left: 20px;">Frame: Cast Aluminum, Powder Coated Yellow</p> <p style="margin-left: 20px;">Speaker: 8Ω, 15W MAX, Weatherproof (Model XAV only)</p> <p style="margin-left: 20px;">Push Button: Solid State Switch 2" ADA Style Vandal Resistant Button</p> <p style="margin-left: 20px;">LEDs: Row of 4 LEDs</p> </div> <div style="width: 35%;"> <p>DC Power Input Options:</p> <p>Add "-DC" to model number</p> <p>Power Requirements:</p> <p style="margin-left: 20px;">10–18 VDC Recommended.</p> <p style="margin-left: 20px;">9mA current draw when idle.</p> <p style="margin-left: 20px;">300–400mA peak current when playing at higher volume levels not including LED output current.</p> </div> </div>				
REV —	REV. DATE 03–07–06	TOLERANCES: .XXX ±.005 .XX ±.02 (EXCEPT AS NOTED)		TITLE MODEL X
ECO	DATE CREATED 05–26–00	SCALE	SHEET 2 OF 2	USE
INFORMATION ON THIS DOCUMENT IS NOT BE USED, COPIED, REPRODUCED OR IN ANY MANNER WITHOUT WRITTEN CONSENT OF POLARA				

9. Tabled Item**06-13 Proposal to Amend Section 7B.08 and 7B.12 (School Zone Signs)**

The City of Santa Ana requested to table this item until they determine the cost and resources conducting an experiment. In addition, they also want to work with the national committee for the proposed changes.